

Product Information

Anti-Human HSA Protein A scaffold, Biotin-Conjugated

Cat. No.: **AFB-28LY**

This product is for research use only and is not intended for diagnostic use.

Product Overview

The Anti-HSA Protein A Scaffold molecule binds with high affinity to native albumin from human, mouse and rat serum. The Anti-HSA Protein A Scaffold molecule can be used as capture reagent or detection reagent in ELISA. It is also well suited for affinity chromatography and depletion of HSA from human serum. The Biotin-Conjugated Anti-HSA Protein A Scaffold molecule is biotinylated at a unique C-terminal cysteine using a maleimide-biotin reagent, facilitating immobilization on various streptavidin coated solid supports.

Antigen Description

Human serum albumin (HSA), a soluble, monomeric protein, is the most abundant protein in human serum. Normal levels are 40-60 mg/ml HSA in blood; however the amount of HSA decreases upon infection. HSA acts primarily as a carrier protein for steroids, fatty acids and thyroid hormones, and it stabilizes extracellular fluid volume. Serum albumin is produced by the liver as pre-proalbumin and it is cleaved twice before secretion.

Specific Activity

Anti-HSA Protein A scaffold molecule binds to native human serum albumin (HSA) and also to serum albumin of mouse and rat origin.

Source

Display library

Species Reactivity

human

Expression Host

E. coli

Applications

ELISA, Affinity chromatography.

Molecular Weight

14.0 kDa

Storage

Short-term storage at +4°C is recommended. For long-term storage, the protein solution should be aliquoted and then stored at -20°C.

There is no decrease in performance of the biotinylated Protein A Scaffold molecule after 10 repeated freeze and thaw cycles or after

ANTIGEN GENE INFORMATION

Gene Name

[ALB albumin \[Homo sapiens\]](#)

Official Symbol

ALB

Synonyms

PRO0883; PRO0903; PRO1341; DKFZp779N1935; ALB; serum albumin; OTTHUMP00000160370; OTTHUMP00000196832; OTTHUMP00000220435; OTTHUMP00000220436; OTTHUMP00000220438; OTTHUMP00000220439; growth-inhibiting protein 20; cell growth inhibiting protein 42

Gene ID

[213](#)

mRNA Refseq

[NM_000477](#)

Protein Refseq

[NP_000468](#)

MIM

[103600](#)

UniProt ID

P02768

Chromosome Location

4q13.3

Pathway

Bile acid and bile salt metabolism, organism-specific biosystem; FOXA2 and FOXA3 transcription factor networks, organism-specific biosystem; Formation of Platelet plug, organism-specific biosystem; HDL-mediated lipid transport, organism-specific biosystem; Lipid digestion, mobilization, and transport, organism-specific biosystem; Metabolism of lipids and lipoproteins, organism-specific biosystem; Platelet degranulation, organism-specific biosystem; Recycling of bile acids and salts, organism-specific biosystem; SLC-mediated transmembrane transport, organism-specific biosystem; Selenium Pathway, organism-specific biosystem; Transport of vitamins, nucleosides, and related molecules, organism-specific biosystem.

Function

Serum albumin, the main protein of plasma, has a good binding capacity for water, Ca(2+), Na(+), K(+), fatty acids, hormones, bilirubin and drugs. Its main function is the regulation of the colloidal osmotic pressure of blood. Major zinc transporter in plasma, typically binds about 80% of all plasma zinc.